

Appl. No. 10/006,669
Amendment filed May 17, 2005
Reply to Office Action of February 17, 2005

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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A disk apparatus for reading and writing data to a storage medium, wherein:

said disk apparatus comprises:

a storage means for storing pieces of defective track information into areas at respective addresses each corresponding to physical track number information, with each piece of the defective track information indicating existence of defective tracks in a plurality of tracks, and for storing pieces of defect information in predetermined groups, with each piece of the ~~defective track~~ defect information indicating information on a defective track in said plurality of tracks; and

a processing means for receiving an instruction of read or write to a track of said storage medium, for referring to said storage means, and for performing defect processing on a defective track, wherein

said storage means stores pieces of pointer information for groups of said pieces of defective track information, with each piece of the pointer information indicating a start address of a storage area for each of said predetermined groups, and

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when said processing means receives an instruction of read or write to a track of said storage medium, said processing means refers to a piece of said defective track information based on said respective addresses, and then, when existence of a defective track is indicated, refers to a piece of pointer information for a group to which said piece of the defective track information belongs, accesses the pieces of defect information on defective tracks sequentially from a storage area indicated by said piece of pointer information, detects defect information when the track as an object of said instruction is a defective track, and performs defect processing on said defective track based on said defect information.

2. (Previously Presented) The disk apparatus according to Claim 1, wherein:

said storage means stores, for each said piece of defect information, physical track number information on said defective track, information indicating a method of the defect processing, and a storage capacity of said piece of defect information or an end location of a storage area for said piece of defect information.

3. (Previously Presented) The disk apparatus according to Claim 1, wherein:

said disk apparatus further comprises a holding means for holding a number of said plurality of tracks corresponding to one piece of defective track information; and

said number held by said holding means is set from outside of the holding means.

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4. (Original) The disk apparatus according to Claim 1, wherein:

said processing means accesses a storage area for said defective track information, according to an address obtained by adding a predetermined base address to an address corresponding to said physical track number information.

5-8. (Canceled)

9. (Original) The disk apparatus according to Claim 1, wherein:

said defect processing performs at least either of skipping processing, in which a defective sector is replaced by a normal sector, and slipping processing, in which a defective sector is replaced by a normal sector that physically follows said defective sector.

10-15. (Canceled)